DOCKET NO. NL031198US1 (STNX01-31198)

SERIAL NO. 10/575,642 PATENT

IN THE CLAIMS

The current claims follow. For claims not marked as amended in this response, any

difference in the claims below and the previous state of the claims is unintentional and in the nature

of a typographical error.

1. (Previously Presented) A boost converter having voltage selectable modes

comprising:

a selection terminal, wherein the selection terminal is associated with a voltage Vin;

a capacitive boost circuit, wherein the capacitive boost circuit is utilized in a capacitive

mode;

an inductive boost circuit, wherein the inductive boost circuit is utilized in an inductive

mode;

a first comparator, wherein the first comparator is configured to compare Vin to a reference

voltage Vref and to select the capacitive mode if Vin>Vref and to select the inductive mode if

Vin<Vref.

2. (Previously Presented) The boost converter of claim 1, wherein the selection terminal

is coupled to a voltage source in the capacitive mode and wherein the selection terminal is coupled to

ground in the inductive mode.

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3. (Currently Amended) The boost converter of claim 1, further comprising a switch

controller configured for performing a switching sequence, the switching sequence operative to cycle

the selected capacitive or inductive mode through an idle phase, an energy storage phase and an

energy transfer phase.

4. (Currently Amended) The boost converter of claim 3, further comprising a set of

switches responsive to the switch controller to execute the switching sequence for the capacitive

mode and a sub-set of the set of switches to execute the switching sequence for the inductive mode.

5. (Previously Presented) The boost converter of claim 3, wherein the switch controller

further comprises a counter for receiving a clock signal and wherein the clock signal controls a

transition from the energy storage phase to the energy transfer phase.

6. (Canceled)

7. (Previously Presented) The boost converter of claim 3 further comprising a second

comparator for comparing a voltage drop over an external resistive element to a voltage reference in

order to trigger a transition from the idle phase to the energy storage phase.

8. (Canceled)

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9. (Previously Presented) A method of DC/DC conversion using a boost converter

having voltage selectable modes and comprising a selection terminal, wherein the selection terminal

is associated with a voltage Vin, a capacitive boost circuit, wherein the capacitive boost circuit is

utilized in a capacitive mode and an induction boost circuit, wherein the inductive boost circuit is

utilized in an inductive mode, the method comprising:

comparing Vin to a reference voltage Vref;

selecting the capacitive mode if Vin>Vref; and

selecting the inductive mode if Vin<Vref.

10.-11. (Canceled)

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